

REMARKS

As a preliminary matter, Applicants traverse the outstanding Office Action in its entirety as being nonresponsive. Section 707.07(f) of the MPEP places a burden upon the Examiner, when repeating a previous rejection, to first answer all of the meritorious arguments set forth by Applicants traversing the rejection. In the present case, however, the Examiner has not done so.

Specifically, in Amendment A, filed July 12, 2004, Applicants directed several arguments toward the fact that the Examiner's proposed obviousness combination does not meet all of the requirements of Section 2143.03 of the MPEP. Section 2143.03 requires that the Examiner must first point to where in the prior art each and every limitation and feature of the invention, as claimed, is taught or suggested. The Examiner though, has not answered Applicants' meritorious arguments pointing out how several features of the present invention are not taught or suggested by the prior art, and that the prior art even teaches away from such features. Accordingly, Amendment A is incorporated by reference herein, and Applicants respectfully request that the Examiner reconsider the arguments contained therein, and withdraw the outstanding Section 103 rejection.

Furthermore, the Examiner appears to address the majority of his "Response to Arguments" to an issue of filtering out center frequencies. Applicants' previous arguments though, were not directed toward this issue, nor were any of the present claim limitations that were discussed. The features of the present claims that were actually argued were those directed toward a crystal oscillator having an oscillation frequency f , the output of which is

passed through a filter equal to and centered to the same oscillation frequency f. These arguments pointed out how the prior art does not teach or suggest a crystal oscillator and a filter *set to the same frequency*. The Examiner has not sufficiently answered or rebutted these arguments.

Applicants even pointed out in Amendment A how the prior art even teaches away from features of the present invention. The Benes reference in particular describes a crystal oscillator having a frequency of 6 MHz, but also that it is coupled with a filter having a frequency range of 15-18 MHz, and centered at 16.5 MHz. (See col. 7, lines 39-51). Benes therefore specifically teaches away from the present invention, by teaching only the combination of a crystal oscillator of 6 MHz with a filter centered at 16.5 MHz, which two are clearly not the same frequencies. The Examiner has not pointed to anywhere within the Benes reference to overcome this clear contradiction to the claims of the present invention.

With respect to the Examiner's remaining comments, Applicants point out that not all of the previous arguments were directed toward the deficiencies in the *prima facie* case of obviousness, as discussed above, but instead toward rebutting such a *prima facie* case, had one been properly established (which Applicants do not concede). It is appropriate to discuss the stated purposes of different prior art disclosures to rebut the proposed combination of such disclosures. The Examiner has an additional burden of establishing where in the prior art itself is taught or suggested the motivation for combining the references. See In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). The

Examiner, however, has not answered these arguments, and appears to have dismissed them without first addressing their merits.

Additionally, the Examiner's citation to the new Malinowski reference (U.S. 4,859,969) fails to overcome the deficiencies noted above. Applicants therefore respectfully request that the Examiner consider the following new arguments, and expansions upon the previous arguments, in determining the appropriateness of maintaining the outstanding rejection based on obviousness.

First, with respect to the Examiner's initial burden to establish a *prima facie* case of obviousness, nowhere in the Malinowski reference has been cited for the teaching that an output sign wave from a crystal oscillator is passed through a filter equal to the oscillation frequency of the oscillator, and then input into a pulse converter. Accordingly, because neither of the two cited references teaches these features (alone or in combination) Applicants submit that an appropriate rejection under Section 103 has still not been established, and that the outstanding rejection must again be withdrawn for at least these additional reasons.

Second, the proposed combination of Benes with Malinowski would not be obvious when both references are concerned with different objectives than the present invention, and both also teach different filter and circuit configurations from the present invention. As such it would not be obvious to combine the two, nor would the present invention be obvious from such a theoretical combination.

Malinowski is primarily concerned with a dual mode oscillator for a device like a clock. Malinowski focuses on the oscillator that incorporates the band-pass filters 114, 116 and the amplifiers 115, 117 respectively. The two filters 114, 116 correspond to, and filter out, the fundamental frequency signal and the beat signal from a crystal oscillator circuit. (See Fig. 1). The stated purpose of the Malinowski circuit is to provide a dual mode crystal oscillator circuit that generates at least two different frequency signals. (See col. 1, lines 52-58). This circuit, and its stated purpose, are thus different from the present invention, which is drawn toward utilizing a synchronous signal generator that can output a sine wave signal having a low level of incurred waveform distortion. (See page 4, lines 11-15 of the present Application).

There is no obvious teaching or suggestion therefore, to combine this circuit from Malinowski with the cited filter from Benes. Benes' stated purpose is to determine the thickness of a coating in a coating process (see col. 1, lines 5-7), and not to output a sine wave signal having low waveform distortion. Benes further teaches, at col. 7, lines 39-51, to filter out the third harmonic component (f_3) from the harmonic spectrum because this f_3 component has the greatest amplitude according to Fourier analysis. Benes only teaches a "relatively broad bandpass filter" (col. 7, line 24), and for harmonic components different from those that are the focus of the present invention.

The present invention contrastingly is drawn toward a synchronous signal generator for outputting a sine wave signal having low incurred waveform distortion. The filter of the present invention converts the signal output from the crystal oscillator so the

level of the fundamental frequency component f_1 is higher than the levels of other associated harmonic components f_s . Neither of the two cited references even teaches or suggests the problem faced by the present inventors, or the solution presented by the claims of the present invention. Without such teachings or suggestions, it would not be obvious to combine the references as the Examiner proposes.

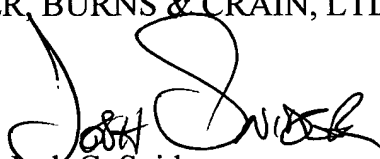
Lastly, the proposed combination is even further not obvious because of Malinowski's additional teachings to implement more than one filter into the disclosed circuit to obtain multiple oscillation signals having different frequencies, and then amplify the outputs from these plural filters to constitute the output signals. (See Figs. 1, 4). The configuration taught by Malinowski thus requires more than one filter, and is therefore incapable of achieving the advantageous configuration of the present invention that utilizes a single filter for pulse conversion of an ideal waveform shaped sine wave to obtain a low jitter pulse signal. Such advantageous results are to be considered by the Examiner in the determination of the appropriateness of maintaining a rejection based on obviousness. Even the proposed combination fails to address, or even suggest, the same advantages realized by the present invention. The obviousness rejection should therefore be withdrawn for at least these additional reasons as well.

For all of the foregoing reasons, Applicants submit that this Application, including claims 1-12, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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